Manitoba Health

Manitoba Health Statistical Update on HIV/AIDS

January 1985 – December 2005

Communicable Disease Control Unit
Public Health

MANITOBA HEALTH STATISTICAL UPDATE ON HIV 1985 TO 2005

HIV – January 1, 1985 to December 31, 2005

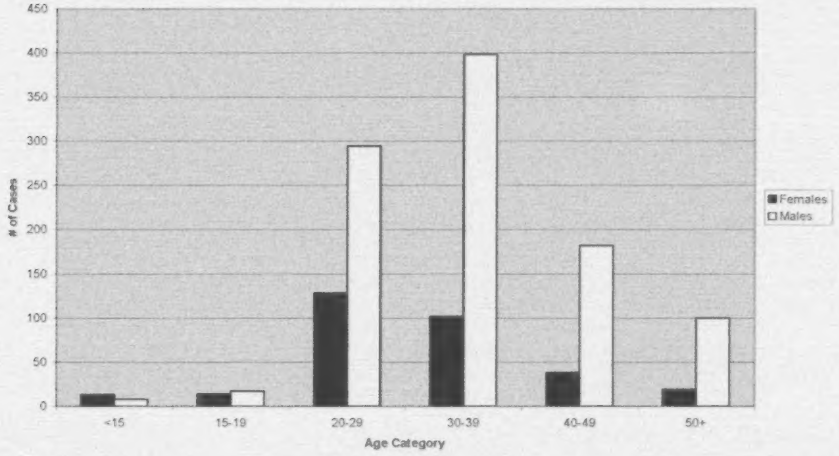
Between January 1 and December 31, 2005, 116 newly diagnosed cases of HIV were reported in Manitoba; 73 males and 43 females, bringing the total number of cases to 1313 since 1985. While females represent 24% of all HIV cases reported since 1985, comparing the 1985-1995 time period to the 1996-2005 time period, the proportion of newly diagnosed HIV cases that are female has almost quadrupled. Between 1996 and 2005, females accounted for over a third of all new HIV cases (269/792), compared to 8.6% (45/521) between 1985 and 1995. The majority of cases, both male and female, were between the ages of 20 and 39 years.

Table 1
ANNUAL NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE, 1985-2005

Year	Male	Female	Total
1985	3	0	3
1986	70	0	70
1987	50	3	53
1988	37	4	41
1989	57	3	60
1990	40	3	43
1991	33	6	39
1992	39	6	45
1993	55	4	59
1994	50	7	57
1995	42	9	51
1996	37	15	52
1997	59	17	76
1998	53	18	71
1999	51	20	71
2000	38	19	57
2001	39	26	65
2002	41	29	70
2003	69	39	108
2004	63	43	106
2005	73	43	116
Total	**999**	**314**	**1313**

Figure 1

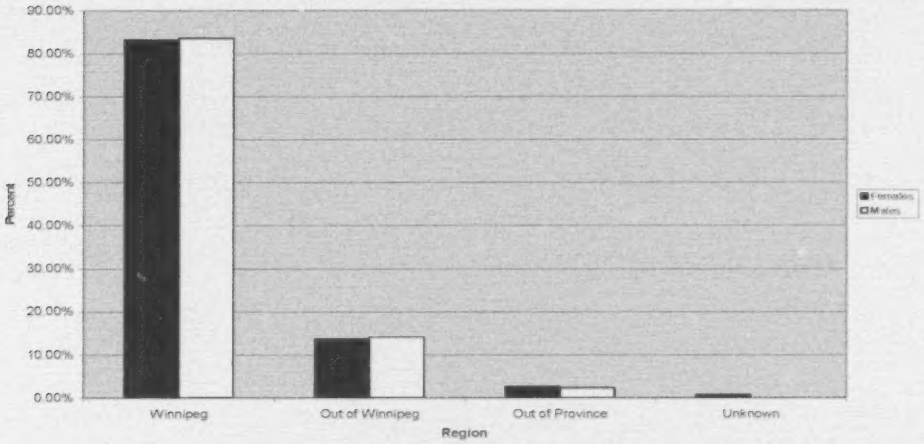
Number of Individuals Testing HIV Antibody Positive by Age and Gender, Manitoba - 1985-2005



Between 1985 and December 31, 2005, 83% (1096/1313) of all HIV cases reported (at the time of testing) were residents of Winnipeg, while 14% (184/1313) of cases resided outside of Winnipeg. Of the total cases, 2% (31/1313) of individuals were from out of province while <1% (2/1313) of individuals reported missing or unknown geographic information.

Figure 2

Percentage of HIV Positive Infections in Manitoba by Region of Residence and Gender, 1985-2005



Self-Reported Ethnicity

Observed changes in ethnic distribution between 1999-2005 are difficult to interpret as almost one-quarter of all HIV Notification forms have incomplete ethnicity information.

In 2005, 25% (29/116 cases) of newly diagnosed cases of HIV were self-reported as Aboriginal at the time of follow-up, 28% (32/116 cases) were self-reported as African/African-Canadian and 28% (32/116) were self-reported as Caucasian. The most common mode of transmission for Aboriginals was heterosexual activity with person(s) at increased risk of HIV (20/29 cases; 69%). For African/African-Canadian, the majority of individuals reported endemic[1] (28/32; 88%) and the majority of Caucasians reported MSM[2] (14/32; 44%).

Between January 1999 and December 2005, the majority of new HIV cases self-reported as Aboriginal (199/593 cases; 34%), Caucasian (163/593 cases; 27%) and African/African-Canadian (112/593 cases; 19%). Proportional changes by ethnicity can be seen in the graph on the following page.

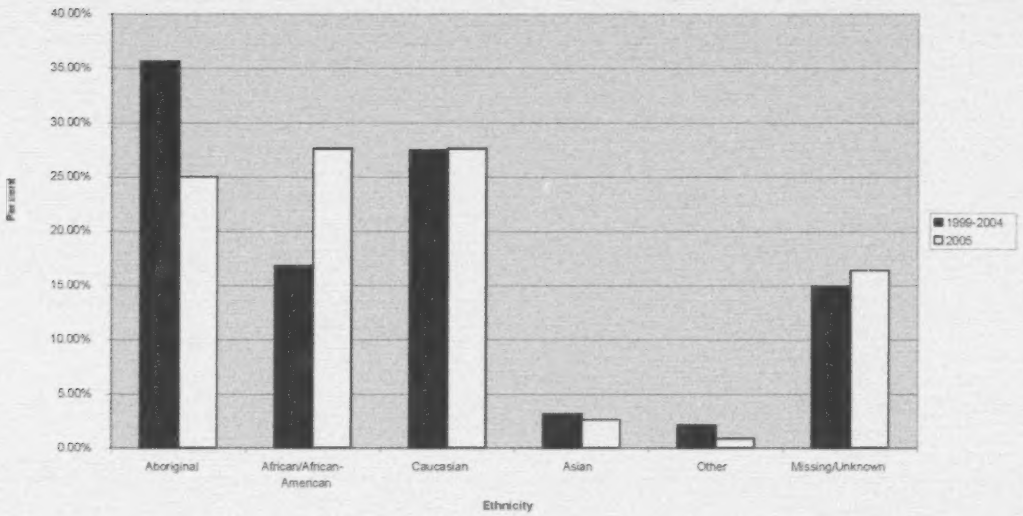
[1] HIV Endemic Country, as defined by the Centre for Infectious Disease Prevention and Control (CIDPC) are those countries that have an adult prevalence (ages 15-49) of HIV that is 1% or greater and one of the following:

- 50% or more of HIV cases are attributed to heterosexual transmission;
- Male to female ratio of 2:1 or less; or
- HIV prevalence greater than or equal to 2% among women receiving prenatal care

[2] Men who have sex with men

Figure 3

Percentage of Positive HIV Cases Annually Reported in Manitoba, January 1999 to December 2004 and January 2005 to December 2005

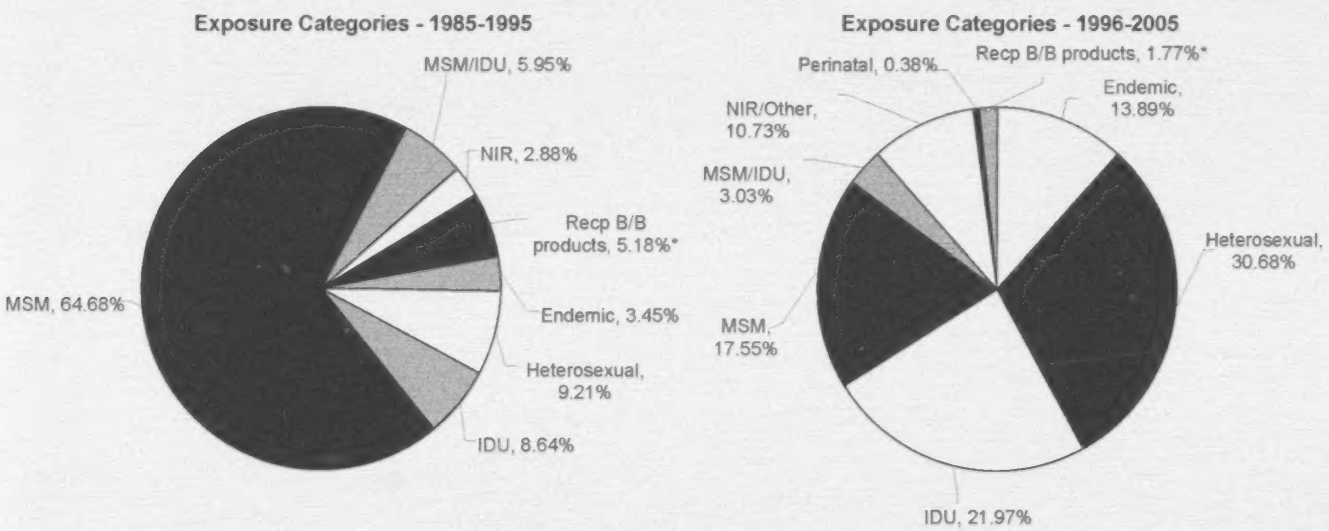


HIV Exposure Categories

Of the 43 females testing HIV positive between January 1, 2005 - December 31, 2005, the predominant exposure categories were having lived/traveled in an HIV endemic country (16/43 cases; 37%) and sex with men who are at an increased risk of HIV (15/43 cases; 35%). Of the 73 males testing HIV positive in the same time period, the predominant exposure categories were sex with females who are at an increased risk of HIV (20/73; 27%) and having sex with men at an increased risk of HIV that had no evidence of IDU (17/73; 23%). Note that no identified risk was reported for 14% (6/43) of females and 15% (11/73) of males.

The two pie charts below show the exposure categories for the previous 21 years (1985-1995; 1996-2005).

Figure 4



*Due to the hierarchical assignment of exposure categories, Blood/Blood Product exposures are difficult to verify.

As can be seen, the proportion of MSM without evidence of IDU decreased from 64.7% (337/521) in the first time period (1985-1995) to 17.5% (139/792) in the second time period (1996-2005). The largest increases (in terms of raw percentage) between the two time periods were seen in the Heterosexual (+21.5%), IDU (+13.3%) and Endemic (+10.4%) exposure categories. As with ethnicity data, exposure categories are determined by self-report and are subject to the same limitations. Although completion rate for this variable is better than for ethnicity, it is important to note that from January 1985 to December 2005, approximately 7.5% (99/1313) of positive HIV cases had no identified exposure category.

AIDS – January 1, 1985 to December 31, 2005

Please note that this report describes AIDS cases based on year of diagnosis of their first AIDS defining illness and not the year that the individual was reported to Manitoba Health as done in previous years.

In 2005, 8 new cases of AIDS were identified; 6 cases were male and 2 cases were female. These case reports bring the total number of AIDS cases to 245 since 1985. The number of reported AIDS cases has declined somewhat over recent years, due in part to early diagnosis and improved treatment of individuals with HIV infection. Seventy-four percent of individuals reported with AIDS have died; however, delays in reporting of both cases and deaths make it difficult to determine precisely the incidence and mortality rate.

Further description of AIDS cases can be found in Appendix D.

APPENDIX A
Reporting of HIV and AIDS in Manitoba

In Manitoba, HIV testing is non-nominal. A prescribed patient code is assigned when a physician completes the appropriate requisition. This code includes the last two letters of the mother's maiden name, the patient's year of birth, day of birth, gender, regional health authority (as defined by number) and first three characters of the patient's postal code. Prior to August 1998, the former Manitoba Health region (as defined by letter) was assigned to identify the patient's region of residence. As well, postal code was not included.

All HIV antibody testing is carried out at Cadham Provincial Laboratory (CPL). Positive test results are subsequently reported to the Director of Communicable Disease Control as required by the *Diseases and Dead Bodies Regulation, Public Health Act*. It has been the practice of Communicable Disease Control (CDC) Unit to enter case information into the HIV Database *after* the physician (requesting the test) has verified the test result as a new or existing case. However, there have been delays in the completion of and return of the *Notification of HIV Infection Form* by health care professionals. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional. This practice will avoid the underreporting of HIV in Manitoba, although, duplicate cases may be included. The CDC Unit continues to work with Regional Health Authorities towards a satisfactory resolution in this regard. A collaborative effort between the Winnipeg Regional Health Authority and the CDC Unit, Manitoba Health has decreased the number of outstanding *Notification of HIV Forms* for 1999 to present.

Twice a year, line-listed data from the HIV database are extracted and forwarded to the Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada in Ottawa for inclusion within the national report, *HIV and AIDS in Canada*. Although non-nominal, the prescribed patient code is stripped prior to release. Instead, a sequential case number assigned by the database is used to distinguish one case from another.

Provincially and nationally, AIDS cases and deaths are reportable by physicians. A federal reporting form, the *AIDS Case Reporting Form* is used for this purpose. New AIDS cases and deaths are reported to the Director of Communicable Disease Control and subsequently forwarded to the Centre for Infectious Disease Prevention and Control. The Centre works diligently with other provinces to ensure that there are no duplications in the counting of cases.

The variations seen from previous reports with respect to the number of AIDS cases and deaths may be accounted for by delays in reporting as well as the fact that in Manitoba, the database is updated immediately once surveillance staff are notified that a particular case has been accounted for in another province.

APPENDIX B

NOTIFICATION OF HIV INFECTION (Form prescribed pursuant to subsection 43(2) The Public Health Act: P210)

DESIGNATED PATIENT CODE _____
(As per CPL requisition: Last two initials of mother's maiden name; year of birth; day of birth; gender; RHA of residence code; 3-digit forward sortation postal code)

PHYSICIAN NAME _____

LABORATORY REQUISITION NUMBER _____

SPECIMEN DATE _____/_____/_____ (yyyy mm dd)

PRINCIPAL REASON FOR TEST (ONE ONLY)

- ☐ Requested by patient (no risk identified)
- ☐ Risk factor present (asymptomatic)
- ☐ Symptomatic
- ☐ STD work-up
- ☐ Travel
- ☐ Insurance
- ☐ Prenatal
- ☐ Other (specify) _____

GENDER ☐ Male ☐ Female ☐ Trans-gender

If female, pregnant? ☐ Yes ☐ No
Receiving anti-retroviral drug(s)? ☐ Yes ☐ No

M/S ☐ Unmarried ☐ Married/CL ☐ S/D/W

COUNTRY OF BIRTH
☐ Canada ☐ Other _____
If other, year of arrival in Canada _____

ETHNICITY
☐ Caucasian ☐ African/African-American
☐ Aboriginal ☐ Asian
Other _____

If aboriginal, treaty status: ☐ Treaty ☐ Non-treaty
Band number: _____

CLINICAL STATUS

Are HIV-related symptoms present? ☐ Yes ☐ No

Does the patient have AIDS? ☐ Yes ☐ No

PAST HISTORY

1) Previous HIV testing? ☐ Yes ☐ No ☐ Unknown
If yes:
Date of most recent negative test: _____
Date of first positive test: _____

2) History of STD ever ☐ Yes ☐ No

3) STD in past 3 months ☐ Yes ☐ No

4) Previous blood or tissue donation ☐ Yes ☐ No

If yes, most recent date _____

Location _____

RISK INFORMATION
(Since 1978; check all client characteristics that apply)

	Yes	No	Unk.
1) Has had sex with:			
A male	☐	☐	☐
A female	☐	☐	☐
2) Has had heterosexual sex with:			
A bisexual partner	☐	☐	☐
An unknown partner	☐	☐	☐
Multiple sex partners	☐	☐	☐
A sex trade worker	☐	☐	☐
A client of a sex trade worker (i.e. patient is a sex trade worker)	☐	☐	☐
A person with known/suspected HIV	☐	☐	☐
An injection drug user	☐	☐	☐
A person from an HIV endemic area	☐	☐	☐
Another high risk partner	☐	☐	☐
3) Has used needles for recreational (non-medical) drug injection	☐	☐	☐
4) Has received blood or blood products a) Prior to Nov. 1985	☐	☐	☐
b) After Nov. 1985	☐	☐	☐
5) Has received blood or blood products for treatment of a coagulation disorder			
a) Prior to Nov. 1985	☐	☐	☐
b) After Nov. 1985	☐	☐	☐
6) Has been exposed to HIV in an occupational setting (e.g. needlestick injury)	☐	☐	☐
7) Born to an HIV positive mother	☐	☐	☐
8) Born in or resident of an HIV-endemic country	☐	☐	☐

9) Has had:
- ☐ **tattoo**
- ☐ **body piercing**
- ☐ **acupuncture**
- ☐ **blood contact from bite, altercation, etc.**

10) Other exposure which could have been source of HIV infection, specify _____

11) No identifiable risk factor ☐

Interview for partners at risk to be done by: Physician Yes ☐ No ☐ **Public Health Nurse** Yes ☐ No ☐

If by public health nurse, physician must first obtain informed consent from client. Has informed consent been obtained? ☐ **Yes** ☐ **No**

CONTACT INFORMATION ON PARTNERS TO BE FOLLOWED BY PUBLIC HEALTH:

Name _____ Home tel _____ Work tel _____
Alias _____ Sex ☐ F ☐ M
Address _____ Postal Code _____ Age/Birth date _____
Occupation _____ Place of Employment/School _____
☐ Live-In Partner ☐ Single Other _____ Lives with ☐ Parents ☐ Informant ☐ Other
Characteristics: Height _____ Wt. _____ Eye Colour _____ Hair _____ Complexion _____
Sexual Exposure: (First) _____ To _____ (Last) Parenteral (First) _____ To _____ (Last)
Notified: Yes ☐ Date _____ No ☐ By Whom _____

APPENDIX C
HIV Descriptive Tables

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY AGE AND GENDER, 2005, 2004, CUMULATIVE 1985-2003 AND 1985-2005

Age	Gender	2005	2004	1985-2003	1985-2005
<15	M	1	0	7	8
	F	2	3	8	13
15-19	M	1	1	15	17
	F	1	2	11	14
20-29	M	15	14	265	294
	F	15	18	95	128
30-39	M	20	28	350	398
	F	15	10	77	102
40-49	M	23	16	143	182
	F	6	7	25	38
50+	M	13	4	83	100
	F	4	3	12	19
Total	**M**	**73**	**63**	**863**	**999**
	F	**43**	**43**	**228**	**314**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY GEOGRAPHIC RESIDENCE AND GENDER, 2005, 2004 CUMULATIVE 1985-2003 AND 1985-2005

Geographic Residence	Gender	2005	2004	1985-2003	1985-2005
Winnipeg	M	59	51	725	835
	F	33	35	193	261
Brandon	M	0	2	2	4
	F	0	0	1	1
Assiniboine	M	2	0	2	4
	F	1	0	0	1
Brandon, Assiniboine	M	0	0	18	18
	F	0	0	1	1
Burntwood	M	3	1	9	13
	F	4	0	3	7
Central	M	3	4	31	38
	F	0	5	10	15
Interlake	M	1	2	28	31
	F	1	0	5	6
Norman	M	0	0	5	5
	F	0	0	1	1
N. Eastman	M	4	3	3	10
	F	3	2	1	6
N. Eastman, S. Eastman	M	0	0	11	11
	F	0	0	2	2
S. Eastman	M	0	0	2	2
	F	0	0	1	1
Parkland	M	0	0	5	5
	F	0	1	1	2
Out of Province	M	1	0	22	23
	F	1	0	7	8
Unknown/Missing	F	0	0	2	2
Total	**M**	**73**	**63**	**863**	**999**
	F	**43**	**43**	**228**	**314**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY EXPOSURE CATEGORY AND GENDER, 2005 and CUMULATIVE 1999-2004

Ethnicity	2005	1999-2004	Grand Total
Aboriginal	29	170	**199**
Caucasian	32	131	**163**
African/African-Canadian	32	80	**112**
Asian	3	15	**18**
Other	1	10	**11**
Missing/Unknown	19	71	**90**
Grand Total	**116**	**477**	**593**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY EXPOSURE CATEGORY AND GENDER, 2005, 2004, CUMULATIVE 1985-2003 AND 1985-2005

Exposure Category	Gender	2005	2004	1985-2003	1985-2005
MSM	M	17	21	438	476
MSM/IDU	M	4	1	50	55
Heterosexual	M	20	11	144	175
	F	15	13	88	116
IDU	M	6	6	120	132
	F	5	7	75	87
Perinatal	M	0	0	2	2
	F	0	0	1	1
Recp B/B products	M	0	0	30	30
	F	1	1	9	11
Occupational	M	1	0	0	1
Endemic	M	14	12	36	62
	F	16	11	39	66
NIR	M	11	12	43	66
	F	6	11	16	33
Total	**M**	**73**	**63**	**863**	**999**
	F	**43**	**43**	**228**	**314**

MSM = men having sex with men
IDU = injection drug use
Recp B/B products = recipient of blood/blood products
NIR = no identified risk
Heterosexual activity includes persons reporting heterosexual activity with person(s) at risk of HIV infection
Endemic includes persons originating from or having traveled from or resided in an HIV-endemic country

APPENDIX D
AIDS Descriptive Tables

NUMBER OF REPORTED AIDS CASES AND DEATHS IN MANITOBA BY YEAR OF DIAGNOSIS

Year	Cases Reported	Deaths Reported
1985	1	1
1986	13	13
1987	9	9
1988	5	5
1989	16	13
1990	10	10
1991	26	21
1992	15	13
1993	15	13
1994	16	12
1995	15	12
1996	17	9
1997	4	3
1998	10	7
1999	12	9
2000	9	9
2001	9	6
2002	12	4
2003	15	7
2004	8	2
2005	8	3
Total	**245**	**181**

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY AGE, GENDER AND YEAR OF DIAGNOSIS

Age Category	Gender	2005	2004	1985-2003	1985-2005
<15	M	0	0	2	2
	F	0	0	1	1
15-19	M	0	0	1	1
	F	0	0	0	0
20-29	M	1	0	33	34
	F	0	2	4	6
30-39	M	0	2	98	100
	F	1	0	10	11
40-49	M	3	1	44	48
	F	1	1	7	9
50+	M	2	1	27	30
	F	0	1	2	3
TOTAL	**M**	**6**	**4**	**205**	**215**
	F	**2**	**4**	**24**	**30**

NUMBER OF REPORTED AIDS CASES BY GEOGRAPHIC RESIDENCE AND GENDER, 2005, 2004, CUMULATIVE 1985-2003 AND 1985-2005

Regional Health Authority	Gender	2005	2004	1985-2003	1985-2005
Assiniboine	M	0	0	3	3
Brandon	M	0	0	3	3
Burntwood	M	0	0	1	1
	F	0	0	1	1
Churchill	F	0	0	1	1
Interlake	M	0	0	4	4
N. Eastman	F	0	1	0	1
Norman	M	0	0	1	1
Parkland	M	0	0	3	3
	F	0	0	1	1
S. Eastman	M	0	0	1	1
Winnipeg	M	6	4	186	196
	F	2	3	21	26
Out of Province	M	0	0	3	3
TOTAL	**M**	**6**	**4**	**205**	**215**
	F	**2**	**4**	**24**	**30**

NUMBER OF REPORTED AIDS CASES BY EXPOSURE CATEGORY AND GENDER, 2005, 2004, CUMULATIVE 1985-2003 AND 1985-2005

Transmission	Gender	2005	2004	1985 -2003	1985 - 2005
MSM	M	3	3	130	136
MSM/IDU	M	0	0	10	10
Heterosexual	M	3	0	24	27
	F	2	2	10	14
IDU	M	0	1	16	17
	F	0	0	7	7
Perinatal	M	0	0	1	1
	F	0	0	1	1
Recp B/B Products	M	0	0	16	16
	F	0	0	2	2
Endemic	M	0	0	4	4
	F	0	2	4	6
NIR	M	0	0	4	4
Total	**M**	**6**	**4**	**205**	**215**
	F	**2**	**4**	**24**	**30**